FIGURE 1

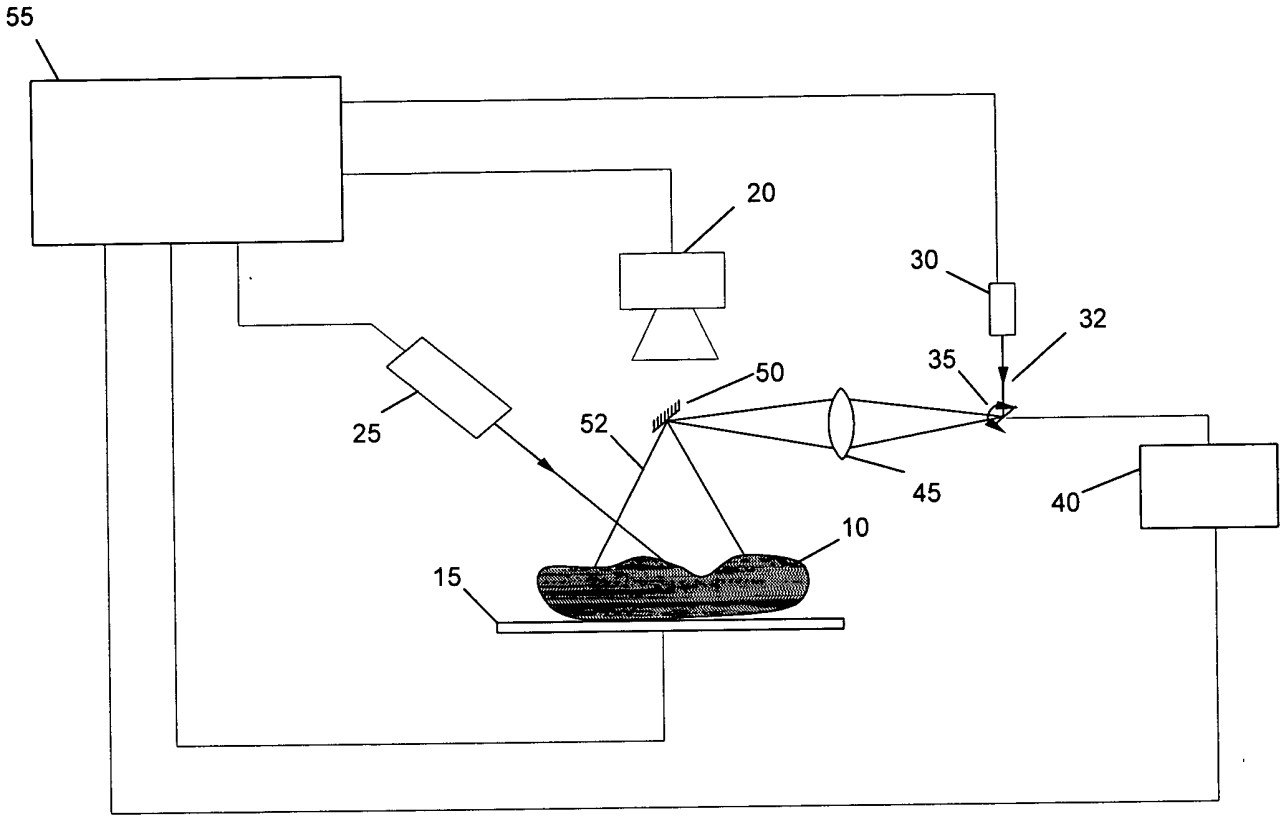


FIGURE 2

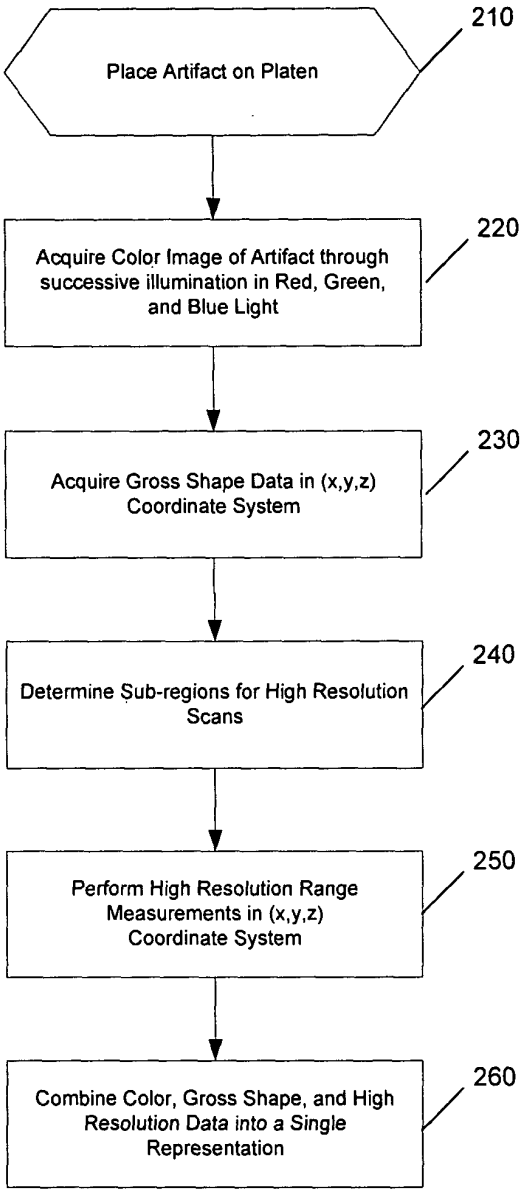

Place Artifact on Platen
210
Acquire Color Image of Artifact through successive illumination in Red, Green, and Blue Light
220
Acquire Gross Shape Data in (x,y,z) Coordinate System
230
Determine Sub-regions for High Resolution Scans
240
Perform High Resolution Range Measurements in (x,y,z) Coordinate System
250
Combine Color, Gross Shape, and High Resolution Data into a Single Representation
260

FIGURE 3

Acquire Color Image Data for Artifact

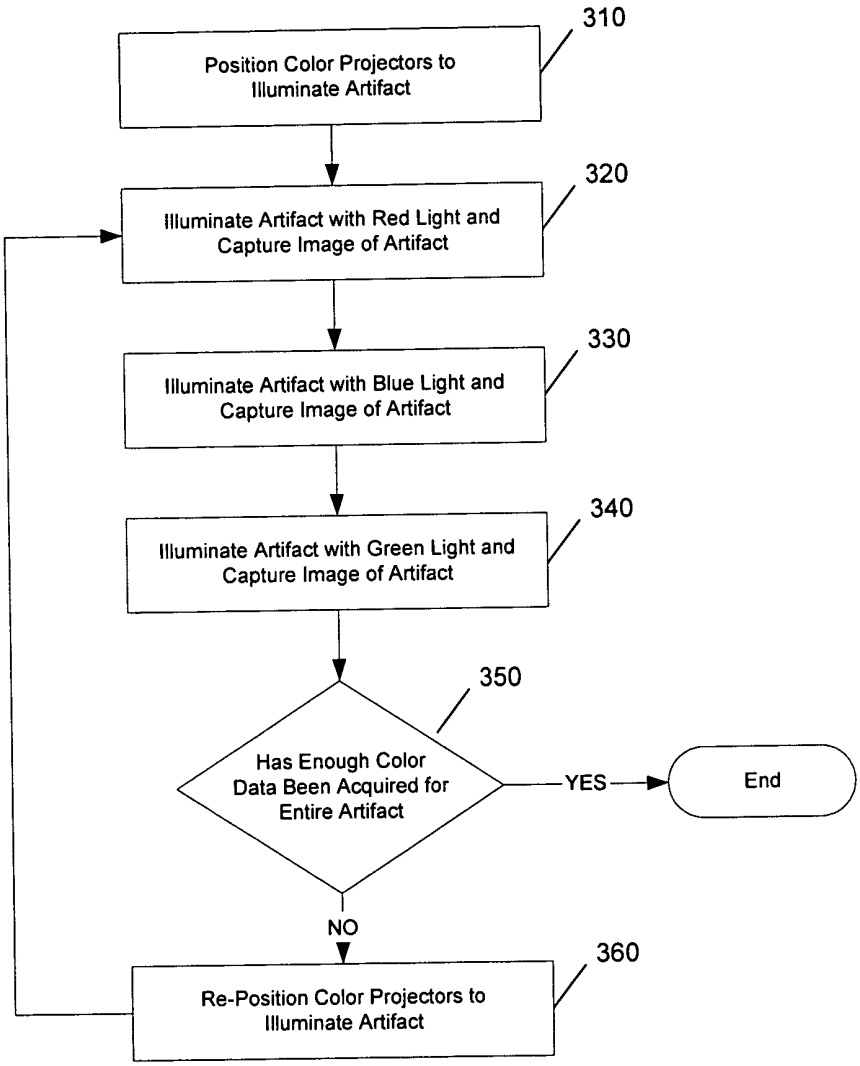


FIGURE 4

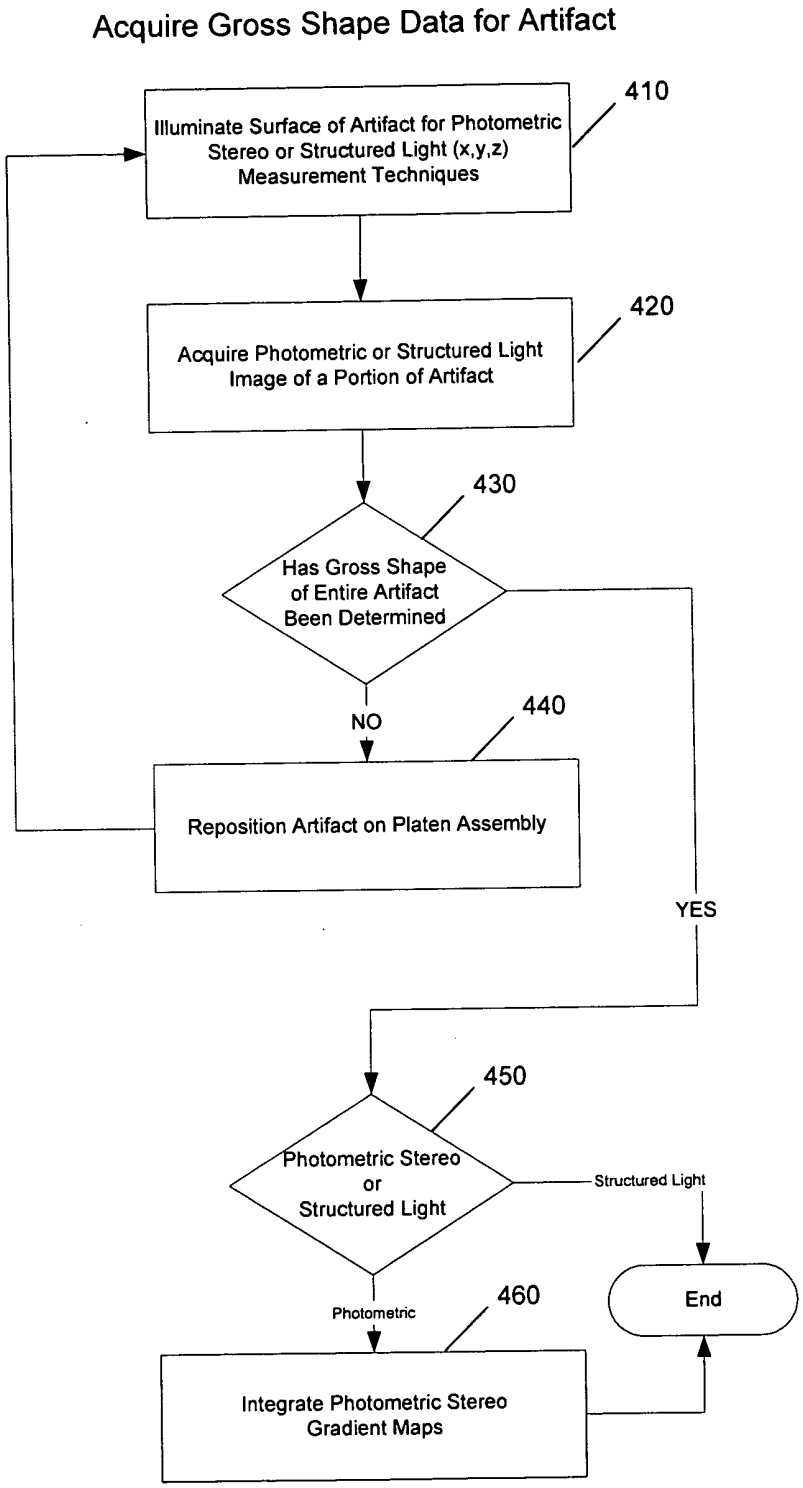
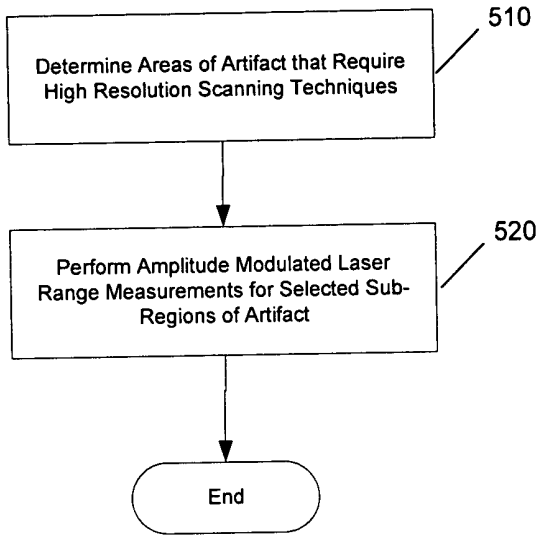

Acquire Gross Shape Data for Artifact
Illuminate Surface of Artifact for Photometric Stereo or Structured Light (x,y,z) Measurement Techniques
410
Acquire Photometric or Structured Light Image of a Portion of Artifact
420
Has Gross Shape of Entire Artifact Been Determined
430
NO
Reposition Artifact on Platen Assembly
440
YES
Photometric Stereo or Structured Light
450
Structured Light
Photometric
Integrate Photometric Stereo Gradient Maps
460
End

FIGURE 5

Acquire High Resolution Shape Data for Artifact